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DATE MAILED: 01/28/2009

#### NOTICE OF ALLOWANCE AND FEE(S) DUE

3 7590 01/28/2009

WASHINGTON DC 20006-1021

WENDEROTH, LIND & PONACK, L.L.P. 2033 K STREET N. W. SUITE 800

EXAMINER					
BELLAMY, TAMIKO D					
ART UNIT	PAPER NUMBER				
2856					

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,566	10/10/2006	Nicolas Frechin	2006_0412A	9264

TITLE OF INVENTION: METHOD FOR DETECTING HYDROCARBONS IN GEOLOGICAL STRATA.

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	04/28/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT, PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless corrects maintenance fee notifica	correspondence includir ed below or directed oth tions.	ng the Patent, advance on herwise in Block 1, by (a	rders and notification of r a) specifying a new corres	naintenance fees was pondence address;	ill be and/o	mailed to the current r (b) indicating a sepa	correspondent rate "FEE AL	e address as DDRESS" for
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APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTO	RNEY DOCKET NO.	CONFIRMA	пол по.
10/574,566	10/10/2006	•	Nicolas Frechin			2006_0412A	926	4
TITLE OF INVENTION	: METHOD FOR DETE	CTING HYDROCARBO	NS IN GEOLOGICAL ST	RATA.				
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nonprovisional	NO	\$1510	\$300	\$0		\$1810	04/28	3/2009
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PLEASE NOTE: Unl	ess an assignee is ident	ified below, no assignee	data will appear on the p T a substitute for filing an	atent. If an assign	e is io	dentified below, the de	cument has b	een filed for
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Please check the appropr	iate assignee category or	categories (will not be pr	inted on the patent):	Individual 🚨 Co	rporati	ion or other private gro	up entity 🔲	Government
4a. The following fee(s)	are submitted:	41	o. Payment of Fee(s): (Plea	se first reapply ar	y prev	lously paid issue fee	shown above)	
Issue Fee			A check is enclosed.					
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interest as shown by the	records of the United Sta	tes Patent and Trademark	Office.					
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10/574,566	10/10/2006	Nicolas Frechin	2006_0412A	9264	
513 75	90 61/28/2009	EXAMINER			
WENDEROTH,	LIND & PONACK,	BELLAMY,	TAMIKO D		
2033 K STREET N. W.			ART UNIT	PAPER NUMBER	
SUITE 800 WASHINGTON I	C 20006-1021		2856		

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 171 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 171 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Application No. Applicant(s) 10/574 566 FRECHIN ET AL. Notice of Allowability Examiner Art Unit TAMIKO D BELLAMY 2856 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to 10/22/08. 2. The allowed claim(s) is/are 1-8. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some\* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. \_\_\_ 3. X Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 6 Interview Summery (PTO-413) Notice of Draftperson's Patent Drawing Review (PTO-946). Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. T Examiner's Amendment/Comment Pacer No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance

of Biological Material

9. ☐ Other

Application/Control Number: 10/574,566 Page 2

Art Unit: 2856

## DETAILED ACTION

# Allowable Subject Matter

Claims1-8 are allowed.

The following is an examiner's statement of reasons for allowance:

Re claims 1 and 4, the independent claim includes "establishing, at a substantially identical depth, a plurality of gaseous hydrocarbon content ratios, in pairs, for at least one first depth-range, the establishing comprising plotting on a plot the content of a first of the gaseous hydrocarbons in the effluent at a given depth versus the content of a second of the gaseous hydrocarbons at the given depth for the successive depths in the at least one first depth range, each data point of the plot corresponding to one of the gaseous hydrocarbon content ratios; and selecting, within the plot, from the plurality of gaseous hydrocarbon content, ratios, a sub-group of reference ratios constituting a signature" in combination with the remaining claim limitation is not taught and/or made obvious by the prior art. See remarks, pages 1-3, received on 10/22/08.

Re claim 2 the independent claim includes "establishing, at a substantially identical depth, a plurality of gaseous hydrocarbon content ratios, in pairs, for at least one first depth range, the means for establishing comprising means for plotting on a plot the content of a first of the gaseous hydrocarbons in the effluent at a given depth versus the content of a second of the gaseous hydrocarbons at the given depth for the successive depths in the at least one first depth range, each data point of the plot corresponding to one of the gaseous hydrocarbon content ratios; means for selecting, within the plot, from the plurality of gaseous hydrocarbon content ratios, a sub-group of reference ratios constituting a signature" in combination with the

Art Unit: 2856

remaining claim limitation is not taught and/or made obvious by the prior art. See remarks, pages 1-3, received on 10/22/08.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance"

#### Conclusion

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAMIKO D. BELLAMY whose telephone number is (571)272-2190. The examiner can normally be reached on Monday - Friday 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/574,566 Page 4

Art Unit: 2856

Tamiko Bellamy /TB/ January 16, 2009 /Hezron Williams/ Supervisory Patent Examiner, Art Unit 2856